# SOL LYNN/ INDUSTRIAL TRANSFORMERS TEXAS

EPA ID# TXD980873327

EPA REGION 6
CONGRESSIONAL DIST. 25
Harris County

Harris County Houston

Other Names: Industrial Transformer Site Industrial Transformers (Sol Lynn)

Updated: 08/08/99

# **Site Description**

**Location:** ! The site is located at 1415, 1417, 1419 S. Loop 610 West in Houston, Harris County,

Texas.

**Population:** ! Approximately 2,100 persons live within one mile of site.

! The greater Houston metropolitan area is one of the 10 largest cities in the nation.

**Setting:** ! The Houston Astrodome/Astrodomain recreational facility is within ½ mile of site.

! Four Houston city water wells and four private water wells which serve more than 10,000 persons are within three miles of this site.

! These wells are screened at depths exceeding 700 feet.

! The site is a former wire and transformer reclamation facility

! PCB's and solvents were dumped on-site over a 1-acre area during these operations.

**Hydrology:** ! The site is within Texas Gulf Coastal Plain, underlain by the Chicot and Evangeline

Aguifers.

! Shallow ground water is found at a depth of about 30 feet.

# **Wastes and Volumes**

! The principal pollutants at the Industrial Transformers/Sol Lynn site include trichloroethylene (TCE)in ground water up to 790 parts per million (ppm) and in soils and up to 600 ppm, and polychlorinated biphenyls (PCBs) in soils ranging to 357 ppm.

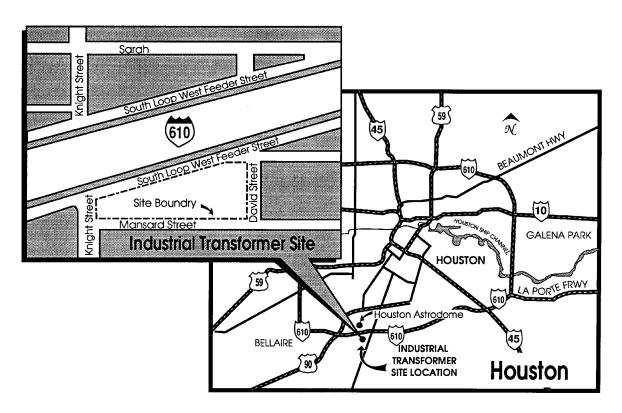
! Approximately 2,400 cubic yards of soil and 4.2 million gallons of ground water are contaminated with site wastes; ground water contamination in the 90-foot zone have not been determined.

# **Site Assessment and Ranking**

# NPL LISTING HISTORY

Site HRS Score: 39.65 Proposed Date: 10/15/84 Final Date: 3/31/89 NPL Update: No. 2

# **Site Map and Diagram**



# **The Remediation Process**

## Site History:

- ! Metals reclamation operations (scrap metals and electrical transformers) were conducted at the site by the owner/operator, Sol Lynn, from 1965 to 1975.
- ! The owner/operator of a chemical supply business, Ken James of Sila-King, leased the 1415 property from Sol Lynn from 1975 until 1981.
- ! During February through April 1989, the Potentially Responsible Party (PRP) fenced the site to limit direct access to hazardous chemicals and subsequently removed contaminated surface soils.
- ! Remediation of the Ground Water began in October 1993; however, numerous leaks occurred in the

recovery well lines, compounded by other required system modifications, necessitated that the treatment plant and the contract treatment operations be shutdown in October 1996.

- ! Maxim Engineering & Environmental, the remediation treatment contractor, has been closed out effective September 1996.
- ! TNRCC, the lead agency, and the EPA is currently overseeing Radian International (the engineer) in its preparation of contract bid documents (3/98) to secure a new contractor and restore ground water treatment operations and the other required system modifications.
- ! TNRCC issued the Notice of Award on 4/24/98 to WRS Infrastructure & Environmental in the amount of \$386,650.00 for piping replacement from recovery wells to treatment plant, includes thirteen new monitoring wells, converting 5 existing monitoring wells to new recovery wells and other work activities. Work anticipated to begin 60-90 days.

#### **Health Considerations:**

- ! Ingestion of TCE from ground water pose a risk to human health.
- ! Site soils and drainage pathways are contaminated by PCBs and TCE.

#### Other Environmental Risks:

! The site is located within ½ mile of the Astrodome, Astroworld Amusement Park, several industrial plants, and apartment complexes frequented by the local population and tourists. However, there are no known exposure pathways to any potential receptors.

## Record of Decision ——

Signed: March 25, 1988 (Source) Amended: September 30, 1992 September 23, 1988 (Ground Water)

#### **Ground Water:**

- ! The ground water Record of Decision (ROD) selected Air Stripping as the remedial technology.
- ! The Texas Natural Resource Conservation Commission (formerly the Texas Water Commission (TWC)) is the lead agency on implementation of this remedy.

#### **Soil Treatment:**

- ! Chemical Dechlorinization was chosen as the Source Control remedy; a process whereby contaminated soils are mixed with chemical reagents to remove halogenated organic compounds.
- ! During pilot/bench testing, the technology performed well; however, upon application in the field, the process could not be effectively implemented at the Sol Lynn site.
- ! The Source Control remedy was thus revised in September 1992, and excavation and off-site disposal was chosen as a final cleanup method for the site.

Other Remedies Considered	Reason Not Chosen
Ground Water	
No Action     Collection and Off-site Disposal	Does not meet statute, does not remedy problem Does not meet SARA's preference for treatment;

3. Deep Well Injection treatment

4. On-site Carbon Adsorption And Discharge

5. On-site Catalytic Dehydrochlorination and Discharge transportation is expensive

Does not meet SARA's preference for

Technical feasibility questioned

Expensive; technical feasibility questioned.

## Other Remedies Considered

### Reason Not Chosen

#### ------Source Control------

1. No Action

2. Off-site Landfill

3. Stabilization and Offsite Landfill

4. In-Situ Vitrification

5. Onsite Incineration

6. Off-site Incineration

7. Biological Treatment

Doesn't remedy problem

Not SARA preference (Alternate Remedy) Not SARA preference, large volume increase

Questionable technically

State objects due to close proximity to

**Astroworld and Astrodome** 

Cost prohibitive Questionable technically

# Community Involvement ———

! Community Involvement Plan: Developed 12/85, revised 4/89

! Open houses and workshops: 1989, 4/91, 7/91

! Original Proposed Plan Fact Sheet and Public Meeting: 2/88 (Source), 8/88 (Ground Water)

! Original ROD Fact Sheet: 5/88 (Source), 10/88 (Ground Water)

! Milestone Fact Sheets: Numerous 1988 press releases (6), 8/89, 2/90, 7/91 (PRPs), 9/92

**!** EPA Amended Proposed Plan and Public Meeting held: 9/92

! Amended ROD Fact Sheet: 12/92 ! Citizens on site mailing list: 104

! Constituency Interest: Generally a low level of interest- air stripping and chemical dechlorinization activities prompted numerous complaints about odors.

! Site Repository: Houston Central Library, Texas & Local History Division, Julia Ideson Building,

500 McKinney Street, Houston, TX 77002

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Availability Notice: 4/89

! Letters of Intent Received:

1) LIFT Endowment Fund, Inc. - 2/8/90 (withdrawn)

! Final Application Received: None

Grant Award: N/A

! Current Status: No apparent citizen interest in applying for the grant.

## Contacts —

! Remedial Project Manager (EPA): Ernest R. Franke, PE - 214-665-8521, Mail Code: 6SF-AT

! State Contact: (TNRCC) Jim Sher, 512/239-2444, Mail Code 144

! Community Involvement Coordinator: Donn Walters, 214-665-6483, Mail Code: 6SF-P

! Attorney (EPA): James L. Turner, 214-665-3159, Mail Code: 6SF-DL

! State Coordinator (EPA): Karen Bond, 214-665-6682, Mail Code: 6SF-AP
 ! Prime Contractor: Fluor Daniel (Source), Radian Co. (Ground Water)(Design)

## Present Status and Issues —

- ! Fencing the site and removing approximately 230 drums containing contaminated waste to an off-site landfill have reduced the possibility of contact with contaminants at the Sol Lynn/ Industrial Transformers site while further cleanup activities are being completed.
- ! The revised Source Control remedy is compete.
- ! Contract bid documents for restoring ground water remedial action has a scheduled completion date in date of December 1998 and the plant is back operative.
- ! TNRCC, the lead agency, shall secure a service and maintenance contract and the Engineer is actively overseeing ground water treatment operations.
- ! High concentrations of TCE are present at several monitoring well locations and new recovery wells are being added to pump these locations. In addition, treatment plant modifications are being designed to accommodate higher TCE input.
- ! Because of the high concentrations of the TCE contaminant in the various site aquifer wells, EPA agreed to conduct a supplemental Remedial Investigation and Feasibility Study (RI/FS) to characterize site contaminants and evaluate alternatives for supplementary groundwater treatment activities.

## **Benefits**

- ! Remedial activities at the Industrial Transformers/Sol Lynn Superfund site have mitigated the threat from site wastes for 2,100 people living and working within one mile of the site.
- ! Upon completion of the Source Control remedy, over 2,700 cubic yards of PCB/TCE-contaminated soil will have been treated and/or removed.
- ! Air Stripping operations to date (December1998) have treated 13.4 million gallons of ground water contaminated with TCE.
- ! First 5-Year review signed 11/25/99 which states the need for the supplement RI/FS site activities.
- **!** Federal Lead Response Action Contract (RAC) to address supplemental RI/FS Activities has been issued. Supplemental Field Activities are currently scheduled to begin in July 2000.